

IN THE CLAIMS

Claims 1, 4-6, 8, and 11-13 are currently pending in the application. Please reconsider the instant application in view of the following claim amendments for claims 1, 4-6, 8, 11, and 12, new added claim 13, and the associated remarks set forth below.

Please amend the claims as follows.

1 (Currently Amended) A power transmission chain comprising:
the chain having a front side adapted to drive a front side drive sprocket and a backside adapted to drive a backside drive sprocket;

a first series of links comprising a plurality rows of links positioned adjacent to each other and separated along a chain direction, the rows of the first series of links including:

a guide link and a drive link, the guide link separated from the drive link in a first lateral direction that is perpendicular to the chain direction, and the guide link and the drive link being substantially the same length along the chain direction;

a second series of links comprising a plurality rows of links positioned adjacent to each other and separated along the chain direction, the rows of the second series of links including:

a guide link and a drive link, the guide link separated from the drive link in a second lateral direction that is perpendicular to the chain direction and opposite the first lateral direction, the guide link and the drive link being substantially the same length along the chain direction;

the drive links of the first and second series each ~~form~~ comprising two front side chain teeth that extend extending from the drive link along the front side of the chain in a front direction that is perpendicular to the chain direction and also perpendicular to the first and second lateral directions, the two front side chain teeth ~~that~~ are adjacent to each other along the chain direction, and ~~that~~ the two front side chain teeth define a region between the two front side chain teeth to accept a sprocket tooth;

the guide links of the first and second series extend adjacent to the region between the two front side chain teeth of the drive links;

the rows of the first series of links are separated along the chain direction by a distance that is less than a length along the chain direction of the links of the second series,

the rows of the second series of links are separated along the chain direction by a distance that is less than a length along the chain direction of the links of the first series;

the first series of links and the second series of links are interleaved along the chain direction so that a row of links of the second series is positioned between and extending adjacent to links of adjacent rows of the first series and a row of links of the first series is positioned between and extending adjacent to links of adjacent rows of the second series,

the drive link of each interleaved row of the first series extending between and adjacent to the drive link and guide link of each row of the second series adjacent to the drive link of the row of the first series and the drive link of each interleaved row of the second series extending between and adjacent to the drive link and guide link of each row of the first series adjacent to the drive link of the row of the second series;

each row of links of the first series ~~being~~are pivotally connected to each row of links of the second series interleaved with the row of links of the first series at locations near the ends of the links of the first series along the chain direction where the adjacent rows of the first series of links and the second series of links are interleaved;

each row of links of the second series ~~being~~are pivotally connected to each row of links of the first series interleaved with the row of links of the second series at locations near the ends of the links of the second series along the chain direction where the adjacent rows of the first series of links and second series of links are interleaved;

~~whereby,~~wherein separations along the chain direction between ends of drive links of adjacent rows of the first series of links are adjacent to the drive links of the second series of links and separations along the chain direction between ends of drive links of adjacent rows of the second series of links are adjacent to the drive links of the first series of links and the guide links of alternate rows of links along the chain direction are positioned on opposite lateral sides of the power transmission chain.

2 and 3 (Cancelled)

4 (Currently Amended) ~~A—~~The power transmission chain according to claim 1, wherein the interleaved links of each row form apertures that are aligned in the lateral directions and the interleaved links are pivotally connected by pins extending through the aligned apertures.

5 (Currently Amended) A ~~The~~ power transmission chain according to claim 1, wherein the drive links define a backside surface opposite the two front side chain teeth, the backside surface ~~including-comprising~~ two backside drive flanks facing at least in part along the chain direction, one backside drive flank being disposed at a first end of the drive link along the chain direction and ~~one~~ another backside drive flank being disposed at a second end of the drive link opposite the first end of the drive link along the chain direction.

6 (Currently Amended) A multi-sprocket power transmission system having an and associated power transmission chain, the system comprising:

a backside drive sprocket having sprocket teeth extending radially outwardly ~~at from~~ an outer surface of the backside drive sprocket, the sprocket teeth being arranged in a first series of sprocket teeth and a second series of sprocket teeth disposed around a circumference of the backside drive sprocket, with the first series of sprocket teeth and second series of sprocket teeth being generally perpendicularly offset from each other ~~along a direction generally perpendicular to the series, the each sprocket tooth teeth~~ of each series of sprocket teeth is separated from adjacent sprocket teeth of the a same series of sprocket teeth to accept a drive link of a power transmission chain there between the adjacent sprocket teeth;

a power transmission chain having a first series of drive links and a second series of drive links, the first and second series of drive links are laterally adjacently interleaved ~~and~~ pivotally connected ~~drive links~~, each drive link of a ~~each~~ series of drive links is positioned adjacent to two drive links of a laterally adjacent series of drive links, one drive link being disposed at each opposite end of the respective drive link along a chain direction thereof;

the drive links define a front side of the power transmission chain and a back side of the power transmission chain, the front side of a drive link is located on a front side of the chain and comprises defining two front side chain teeth for meshing with a front side drive sprocket, the backside of a drive link is located on a backside of the chain and comprises defining backside flanks at opposite ends of the backside of the drive link along the chain direction, and configured so that the back side of the drive link is configured to accept ~~accepted between adjacent a sprocket teeth tooth~~ of a series of sprocket teeth of the backside drive sprocket;

the power transmission chain having a guide link laterally adjacent to and separated from each of the drive links, so that an interleaved drive link is disposed between and adjacent to the guide link and drive link at each opposite end of the drive link along the chain direction; and

the power transmission chain engaging the backside drive sprocket positioning the first series of drive links between and engaging teeth of the first series of sprocket teeth and the second series of drive links between and engaging the second series of sprocket teeth.

7 (Cancelled)

8 (Currently Amended) The sprocket and power transmission ~~chain of system~~ according to claim 6, wherein the chain further comprises pins pivotally connecting interleaved drive links and guide links.

9 and 10 (Cancelled)

11 (Currently Amended) A The power transmission chain according to claim 1, wherein the guide link and the drive links provide uniform stiffness across the row of links.

12 (Currently Amended) A The power transmission chain according to claim 11, wherein the rows of links include a plurality of drive links, the plurality of drive links are immediately adjacent to provide providing drive link stiffness ~~that that provides~~ and uniform stiffness across the rows of links.

13 (New) A silent chain comprising:

a plurality of first link rows, each of the first link rows consisting essentially of one guide plate and a number N of link plates;

a plurality of second link rows, each of the second link rows consisting essentially of one guide plate and a same number N of link plates; and

a plurality of connection pins, wherein the guide plates of the first link rows and the second link rows are of the same shape and size, the link plates of the first link rows and the second link rows are of the same shape and size, wherein said first link rows and said second link rows are connected in alternating, interleaving relationship along a longitudinal direction of the chain by the connection pins whereby the guide plates of successive interleaving link rows are in staggered relationship along the longitudinal direction of the silent chain, each said connection pin extending through the link plates and guide plates of two successive interleaving link rows, wherein the link plates and guide plates through which each connection pin extends consist of the link plates and one guide plate of each of two successive interleaving link rows, and wherein the guide plates and the link plates of each pair of successive interleaving first and second link rows are relatively rotatable joined on the connection pin extending there through.